

**A PRELIMINARY CHECK-LIST TO THE PTERIDOPHYTA AND
SPERMATOPHYTA OF THE GRASSLAND AND SWAMP
COMMUNITIES OF THE NGOYE FOREST RESERVE,
ZULULAND**

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ABSTRACT

A check-list to the plant species of the grassland and swamp communities in the Ngoye Forest Reserve is presented. A brief floristic analysis is included.

UITTREKSEL

'N VOORLOPIGE KONTROLELYS VAN DIE PTERIDOFIETE EN SPERMATOFIETE VAN DIE GRASVELD EN MOERASGEMEENSAPPE IN DIE NGOYE WOODRESERVAAT, ZULULAND.

'n Kontrolelys van die plantsoorte van die grasveld en moerasgemeenskappe in die Ngoye Woudreservaat word aangebied. 'n Beknopte floristiese ontleding word ingesluit.

INTRODUCTION

The Ngoye Forest Reserve is situated on the summit of the Ngoye Mountain in the Mtunzini District of Zululand at an altitude between 200 and 450 m above sea-level. Floristically the vegetation belongs to the humid coastal subtropical type.

The largest portion of the reserve is covered by forest, whilst the remainder consists of grassland and swamp communities. The latter communities are relatively small and are found along streams, in depressions and on hill-slope seepages.

Although the forest and its surrounds have been known to botanists for nearly a century and although the object of many a dispute on its protection, relatively little collecting and botanical work was undertaken in the past. This list was thus compiled as a preliminary index to the species of the grassland and swamps. A more comprehensive, annotated check-list including the forest species is envisaged for the future.

An analysis of the check-list shows that the Gramineae, 54 species; Compositae, 44 species; Leguminosae, 30 species; Cyperaceae, 19 species; and Liliaceae, 18 species; are the families best represented. The largest genera are *Helichrysum*, 12 species; *Senecio*, 11 species; *Eragrostis*, 5 species; *Hyparrhenia*, *Hypoxis*, *Indigofera*, *Lasiosiphon*, *Panicum*, *Scilla*, and *Scleria*, 4 species.

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The check-list is compiled from herbarium specimens of species collected and species observed during various visits of the author to the reserve.

Genera of the Pteridophyta have been arranged according to Schelpe (1969). The genera of the Spermatophyta have been arranged after Dalla Torre et Harms (Phillips, 1951). Species have been listed alphabetically.

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- PHILLIPS, E. P., 1951. The Genera of South African Flowering Plants. *Bot. Surv. S. Afr.* **25**. Pretoria: Dept. of Agriculture.
 SCHELPE, E. A. C. L. E., 1969. Revised Check-list of the Pteridophyta of Southern Africa. *Jl S. Afr. Bot.* **35**: 127-140.

PTERIDOPHYTA

Lycopodiaceae

- Lycopodium carolinianum* L.
L. cernuum L.

Selaginellaceae

- Selaginella dregei* (Presl) Hieron.

Schizaeaceae

- Mohria caffrorum* (L.) Desv.

Dennstaedtiaceae

- Pteridium aquilinum* (L.) Kuhn

Adiantaceae

- Pteris vittata* L.
Cheilanthes multifida Sw.
Pellaea quadripinata (Forsk.) Prantl
P. viridis (Forsk.) Prantl var. *glauca* Sim

Thelypteridaceae

- Thelypteris dentata* (Forsk.) E. St. John

GYMNOSPERMAE

Stangeriaceae

- Stangeria eriopus* (Kuntze) Nash

Cycadaceae

- Encephalartos ngoyanus* Verdoorn

ANGIOSPERMAE

Gramineae

- Imperata cylindrica* (L.) Beauv.
Eriochrysis pallida Munro
Eulalia villosa (Thunb.) Nees
Ischaemum arcuatum (Nees) Stapf
Hemarthria altissima Stapf & C. E. Hubb.
Coelorhachis capensis Stapf
Trachypogon spicatus (L.f.) Kuntze
Elyonurus argenteus Nees
Andropogon shirensis Hochst.
Schizachyrium semibere Nees
Cymbopogon validus Stapf & Burtt Davy
Hyparrhenia cymbaria (L.) Stapf
H. dissoluta (Nees) C. E. Hubb.
Hyparrhenia cf. *H. dregea* Stapf
H. filipendula (Hochst.) Stapf
H. gazensis (Rendle) Stapf
H. hirta (L.) Stapf
Monocymbium cereisiiforme (Nees) Stapf
Sorghastrum rigidifolium (Stapf) L. Chippindall
Themeda triandra Forsk. var. *imberbis* (Retz.) A. Camus
Paspalum commersonii Lam.
P. dilitatum Poir.
P. distichum L.
Panicum dregeanum Nees
P. hymenochilum Nees var. *glandulosum* Nees
P. maximum Jacq.
P. natalense Hochst.

Gramineae—Continued

- Alloteropsis semialata (R. Br.) Hitchc.
 Brachiaria brizantha (Hochst.) Stapf
 B. humidicola (Rendle) Schweick.
 Sacciolepis curvata (L.) Chase
 Digitaria argyrograptia (Nees) Stapf
 D. macroglossa Henr.
 Rhynchelytrum repens (Willd.) C. E. Hubb.
 Setaria rigida Stapf
 S. sphacelata (Schumach.) Stapf & C. E. Hubb. ex M. B. Moss
 Stenotaphrum secundatum (Walt.) Kuntze
 Leersia hexandra Sw.
 Ehrharta erecta Lam. var. natalensis Stapf
 Aristida junciformis Trin. & Rupr.
 Sporobolus africanus (Poir.) Robyns et Tournay
 S. centrifugus Nees
 S. pyramidalis Beauv.
 Tristachya hispida (L.f.) K. Schum.
 Trichopteryx dregeana Nees
 Cynodon dactylon (L.) Pers.
 Ctenium concinnum Nees
 Dactyloctenium australe Steud.
 Eragrostis atrovirens (Desf.) Trin.
 E. capensis (Thunb.) Trin.
 E. curvula (Schrad.) Nees
 E. racemosa (Thunb.) Steud.
 E. superba Peyr.
 Stiburus alopecuroides (Hack.) Stapf

Cyperaceae

- Ascolepis capensis Ridley
 Cyperus isocladius Kunth
 C. obtusiflorus Vahl
 Pycreus ferrugineus C.B. Cl.
 P. polystachyos Beauv.
 Kyllinga cf. K. elatior Kunth
 Fuirena chlorocarpa Ridley
 Fimbristylis dichotoma (L.) Vahl
 F. hygrophila Gordon-Gray
 F. monostachyos Hassk.
 Bulbostylis contexta (Nees) Gordon-Gray
 Rhynchospora corymbosa (L.) Britt.
 R. glauca Vahl
 R. mauritii Steud.
 Schoenoxiphium cf. S. caricoides C.B. Cl.
 Scleria melanomphala Kunth
 S. natalensis C.B. Cl.
 S. nutans Willd. ex Kunth
 S. species (H. J. T. Venter 2380)—undescribed

Araceae

- Stylochiton natalense Schott

Xyridaceae

- Xyris anceps Lam.
 X. capensis Thunb.

Eriocaulaceae

- Eriocaulon sonderianum Koern.

Commelinaceae

- Commelina africana L.
 C. benghalensis L.
 C. eckloniana Kunth
 Cyanotis speciosa (L.f.) Hassk.

Juncaceae

- Juncus lomatophyllus Spreng.

Liliaceae

- Androcymbium longipes Bak.
 Bulbine frutescens (L.) Willd.
 Anthericum angulicaule Bak.
 A. saundersiae Bak.
 Chlorophytum krookianum Zahlbr.
 Kniphofia laxiflora Kunth
 Aloe umfoloziensis Reynolds
 A. arborescens Mill.
 Agapanthus campanulatus Leight. subsp. patens Leight.
 Albuca setosa Jacq.
 A. species (H. J. T. Venter 2492)
 Scilla cooperi Hook.f.
 S. natalensis Planch.
 Scilla cf. S. polyantha Bak.
 Scilla cf. S. sandersonii Bak.
 Resnova schlechteri (Bak.) v. d. Merwe
 Eucomis cf. E. pole-evansii N. E. Br.
 Ornithogalum virens Lindl.
 Asparagus africanus Lam.

Amarylhidaceae

- Anoiganthus breviflorus (Harv.) Bak.
 Cyrtanthus contractus N.E. Br.
 Hypoxis argentea Harv.
 H. filiformis Bak.
 H. membranacea Bak.
 H. rooperi S. Moore

Dioscoreaceae

- Dioscorea sylvatica Eckl.

Iridaceae

- Aristea cognata N. E. Br.
 A. woodii N.E. Br.
 Dierama elatum N.E. Br.
 Tritonia cf. T. lineata Ker
 Gladiolus crassifolius Bak.
 Gladiolus cf. G. papilio Hook.f.
 Lapeirousia laxa (Thunb.) N.E. Br.
 Watsonia densiflora Bak.

Orchidaceae

- Habenaria woodii Schltr.
 Satyrium longicauda Lindl.
 Schizochilus zeyheri Sond.

Orchidaceae—*Continued*

- Disa caffra* Bol.
D. polygonoides Lindl.
Polystachya pubescens Reichb.f.
Eulophia speciosa (R. Br. ex Lindl.) Bol.
E. parviflora (Lindl.) Hall

Proteaceae

- Protea multibracteata* Phill.

Santalaceae

- Thesium costatum* A. W. Hill
T. natalense Sond.

Polygonaceae

- Polygonum pulchrum* Blume

Phytolaccaceae

- Psammotropha myriantha* Sond.

Cruciferae

- Heliophila elongata* (Thunb.) DC.

Droseraceae

- Drosera burkeana* Planch.
D. madagascariensis DC.

Crassulaceae

- Cotyledon zuluensis* Schonl.
Kalanchoe rotundifolia Haw.
Crassula ericoides Haw.
C. heterotricha Schinz
C. rubicunda E. Mey.

Rosaceae

- Cliffortia serpyllifolia* Cham. & Schlecht.

Leguminosae

- Cassia biensis* (Stayaert) Mendoca & Torre
C. mimosoides L.
Aspalathus gerrardii Bol.
Dichilus strictus E. Mey.
Crotalaria natalensis Bak.f.
Argyrolobium harveianum Oliv.
A. rupestre (Eckl. & Zeyh.) Walp.
A. tuberosum Eckl. & Zeyh.
A. species (H. J. T. Venter 2365)
Indigofera cylindrica DC.
I. hedyantha Eckl. & Zeyh.
I. sanguinea N.E. Br.
I. tristis E. Mey.
Psoralea pinnata L.
Tephrosia grandiflora (Ait.) Pers.
T. longipes Meisn.
T. macropoda (E. Mey.) Harv.
T. polystachya E. Mey.
Zornia capensis Pers.
Desmodium canum (J. F. Gmel.) Schinz & Thell.

- D. dregeanum* Benth.
D. hirtum Guill. & Perr.
Pseudarthria hookeri Wight & Arn.
Dalbergia obovata E. Mey.
Rhynchosia stenodon Bak.f.
R. totta (Thunb.) DC.
Eriosema cordatum E. Mey.
E. parviflorum E. Mey.
E. salignum E. Mey.
Vigna vexillata (L.) Benth.

Geraniaceae

- Pelargonium alchemilloides* (L.) Ait.
P. luridum (Andr.) Sweet

Oxalidaceae

- Oxalis semiloba* Sond.

Linaceae

- Linum thunbergii* Eckl. & Zeyh.

Polygalaceae

- Polygala capillaris* E. Mey.
P. rehmannii Chod.
P. hottentotta Presl.

Euphorbiaceae

- Phyllanthus meyerianum* Muell. Arg.
Adenocline bupleuroides Prain
Acalypha peduncularis E. Mey.
Clutia abyssinica Jaub. & Spach. var. *abyssinica*
C. pulchella L.

Callitrichaceae

- Callitriche bolusii* Schonl. & Pax ex Marl.

Anacardiaceae

- Rhus discolor* E. Mey.

Celastraceae

- Maytenus nemorosa* (Eckl. & Zeyh.) Marais

Hippocrateaceae

- Salacia kraussii* (Harv.) Harv.

Vitaceae

- Rhoicissus tridentata* (L.f.) Wild & Drumm.

Tiliaceae

- Triumfetta pilosa* Roth. var. *effusa* (E. Mey. ex Harv.) Wild

Malvaceae

- Sida cordifolia* L.
Hibiscus diversifolius Jacq. subsp. *diversifolius*

Guttiferae

- Hypericum aethiopicum* subsp. *sonderi*
(Bred.) Robs.
H. lalandii Choisy

Thymelaeaceae

- Lasiophon anthylloides* Meisn.
L. caffer Meisn.
L. kraussii Meisn.
L. splendens Endl.
Arthrosolen calocephalus (Meisn.) C. A. Mey.
Passerina filiformis L.

Myrtaceae

- Eugenia albanensis* Sond.

Melastomataceae

- Dissotis canescens* (Grah.) Hook.f.

Halorrhagidaceae

- Lauremburgia repens* Berg.

Umbelliferae

- Centella coriacea* Nannfd.
C. glabrata L. var. *natalensis* Adams.
Alepidea gracilis Bumm. var. *major* Weim.

Primulaceae

- Lysimachia ruhmeriana* Vatke

Ebenaceae

- Diospyros galpinii* (Hiern) De Wint.
D. whyteana (Hiern) F. White

Gentianaceae

- Sebaea sedoides* Gilg.
Belmontia grandis (E. Mey.) Steud.

Asclepiadaceae

- Xysmalobium involucreatum* (E. Mey.) Decne.
X. undulatum (L.) Ait.F.
Pachycarpus concolor E. Mey.
Asclepias burchellii Schltr.
Brachystelma flavidum Schltr.

Convolvulaceae

- Convolvulus farinosa* L.
Ipomoea obscura (L.) Ker-Gawl. var. *fragilis* (Choisy) A. Meeuse
I. obscura (L.) Ker-Gawl. var. *obscura*

Labiatae

- Leonotis dysophylla* Benth.
Stachys nigricans Benth.
Pycnostachys reticulata (E. Mey.) Benth.

- Plectranthus calycinus* Benth.
P. tomentosus Benth.
Syncolostemon argenteus N.E. Br.
S. densiflorus E. Mey.
Thorncroftia thorncroftii (S. Moore) Codd

Solanaceae

- Solanum incanum* L.

Scrophulariaceae

- Zaluzianskya maritima* Walp.
Selago hyssopifolia E. Mey.
Alectra orobanchoides Benth.
A. sessiliflora (Vahl) Kuntze
Sopubia simplex Hochst.
Buchnera glabrata Benth.
Cynium adonense E. Mey.
Striga bilabiata (Thunb.) Kuntze

Lentibulariaceae

- Utricularia prehensilis* E. Mey.

Acanthaceae

- Thunbergia atriplicifolia* E. Mey. ex Nees
Chaetacanthus setiger (Pers.) Lindl.
Asystasia gangetica (L.) T. Anders.
Decliptera zeylanica Nees
Justicia protracta (Nees) T. Anders.

Rubiaceae

- Kohautia amatymbica* Eckl. & Zeyh.
Oldenlandia cephalotes (Hochst.) Kuntze
O. herbacea (L.) Roxb.
Pentas angustifolia (A. Rich. ex DC.) Verdc.
Pentanisia prunelloides (Kl. ex Eckl. & Zeyh.) Walp.
Pachystigma latifolium Sond.
Anthospermum herbaceum L.f.
Richardia brasiliensis (Moq.) Gomez
Diodia natalensis (Hochst.) Garc.

Dipsacaceae

- Cephalaria pungens* Szabó
Scabiosa columbaria L.

Cucurbitaceae

- Cucumis zeyheri* Sond.

Campanulaceae

- Cyphia elata* Harv.
Lobelia alata Labill.
Monopsis belliflora E. Wimm.
M. scabra (Thunb.) Urb.

Compositae

- Vernonia corymbosa* Less.
V. hirsuta Sch. Bip.

Compositae—Continued

- V. kraussii* Sch. Bip.
Aster muricatus Less.
Nidorella auriculata DC.
Laggera alata (D. Don.) Sch. Bip. ex Oliv.
Helichrysum adenocarpum DC.
H. adscendens Less.
H. appendiculatum Less.
H. aureo-nitens Sch. Bip.
H. decorum DC.
H. foetidum (L.) Cass.
H. kraussii Sch. Bip.
H. longifolium DC.
H. miconiaefolium DC.
H. nudifolium (L.) Less. var. *nudifolium*
H. nudifolium (L.) Less. var. *quinquenerve* (Thunb.) Moeser
H. panduratum O. Hoffm.
H. stenopterum DC.
Athrixia phyllioides DC.
Aspilia mossambicensis (Oliv.) Wild
A. natalensis (Sond.) Wild
Athanasia punctata (DC.) Harv.
Schistostephium crataegifolium Fenzl
Cineraria deltoidea Sond.
Senecio bupleuroides DC.
S. erubescens Ait. var. *incisus* DC.
S. fibrosus O. Hoffm.
S. inophyllus Phill. & C.A. Sm.
S. latifolius DC.
S. oxyodontus DC.
S. oxyriaefolius DC.
S. pterophorus DC.
S. ruderalis Harv.
S. serratuloides DC.
S. speciosus Willd.
Gamolepis debilis Harv.
Osteospermum grandidentatum DC.
Gazania krebsiana Less. subsp. *serrulata* (DC.) Roessl.
Berkheya radula (Harv.) De Wild.
B. setifera DC.
Gerbera natalensis Sch. Bip.
G. piloselloides Cass.
Hypochoeris radiata L.
Lactuca capensis Thunb.
Crepis hypochaeridea DC.